



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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The US. Environmental Protection Agency (EPA) and the U.S. Navy entered into an Administrative Order on Consent (the Order) in January 2000. The Order requires investigation, and if necessary cleanup, of twelve non-range areas at the Atlantic Fleet Weapons Training Facility and the Eastern Maneuver Area, located on the eastern end of Vieques Island, Puerto Rico. In addition, the Order requires sampling of the ground water along the western perimeter of the Navy owned lands, to determine if any contamination is present there, and if so, whether it could impact areas in the central portion of Vieques Island.

Sometime in August, EPA is planning to publish a notice announcing a thirty (30) calendar day public comment period on the work plans for the twelve areas required to be investigated under the Order, as well as work plans for completing the ground water investigations along the western perimeter of the Navy owned lands.

EPA is also planning to hold a public availability meeting to answer questions regarding those work plans. The Agency will announce the time, date, and location for the public availability meeting in the upcoming public notice.

Community Fact Sheet



SUMMER 2002

RCRA FACILITY INVESTIGATION

BACKGROUND

The U.S. Navy owns about 14,600 acres on the eastern side of Vieques Island. The Eastern Maneuver Area (EMA) takes up 11,000

The U.S. Department of the Navy is beginning an environmental investigation of potential contamination on some of its property on the eastern side of Vieques Island, Puerto Rico. The U.S. Environmental Protection Agency (EPA) is overseeing this work through an Administrative Order on Consent (Consent Order) signed with the Navy. This fact sheet explains the process for planning and carrying out this environmental investigation, as well as cleanup or other actions needed to protect the public and the environment, and opportunities for the public to provide input into this work. Terms and acronyms in bold print are explained in the Glossary.

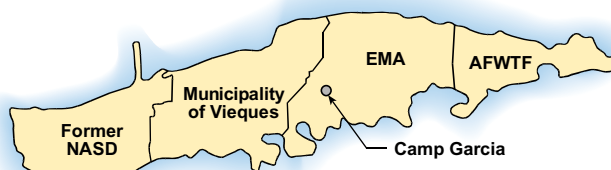
acres on the east-central portion of the island and the Atlantic Fleet Weapons Training Facility (AFWTF) takes up 3,600 acres on the far eastern end of the island (see Figure 1). The AFWTF and EMA have been used for naval training exercises. Camp Garcia, located in the EMA, contains public works facilities to main-

tain the vehicles, buildings, roads and utilities that are needed for Navy activities on Vieques. These lands contain areas that may have been contaminated by past activities such as training exercises, maintenance activities, storage of supplies, and waste disposal.

Since May 1999, the Navy has only used inert (non-explosive) **ordnance** on the training range. However, most of the Navy's past training on the live impact area of AFWTF before that date used explosive ordnance. As part of normal operations, unexploded ordnance (UXO) has been periodically cleared from the training range and destroyed by open burning/open detonation at the AFWTF. Some expired or otherwise deteriorated munitions were also destroyed there.

WESTERN VIEQUES

In April 2001, the Navy transferred 8,100 acres of land on the western side of island to the Municipality of Vieques, the Puerto Rico



Conservation Trust and the U.S. Department of Interior. CERCLA requires the Navy to conduct all necessary investigations and cleanup work to protect human health and the environment from any hazardous substances remaining from past Navy activities on this transferred property. (CERCLA is the Comprehensive Environmental Response and Liability Act, which is more commonly known as "Superfund.")

Seventeen potentially contaminated sites on the western lands are currently being investigated, to determine what cleanup actions are needed. The Navy is the **lead agency** for the work on western Vieques, with guidance from the Puerto Rico Environmental Quality Board (EQB) and EPA.

EASTERN MANEUVER AREA
AND ATLANTIC FLEET
WEAPONS TRAINING
FACILITY (NON-RANGE)
VIEQUES ISLAND,
PUERTO RICO

WHAT IS RCRA?

The **Resource Conservation and Recovery Act (RCRA)** is the federal law through which EPA regulates and permits facilities that store, treat or dispose of solid and hazardous wastes. Under RCRA, EPA can also require facilities that are subject to RCRA permit regulations to investigate and clean up any wastes that may have been released into the environment. This cleanup process is called a **corrective action**. Figure 2 illustrates the RCRA corrective action process and the opportunities for public participation.

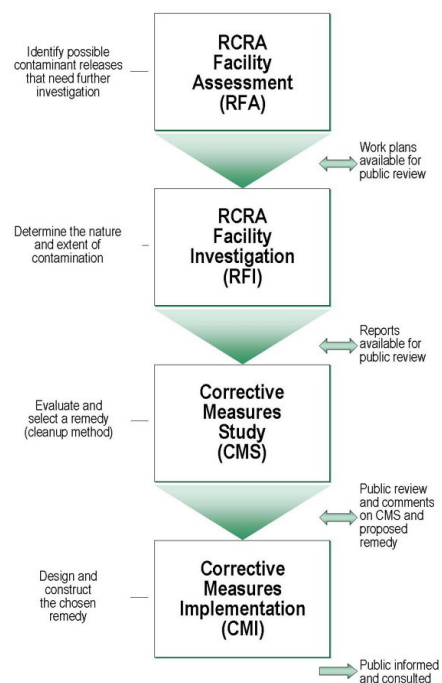


Figure 2
RCRA Process



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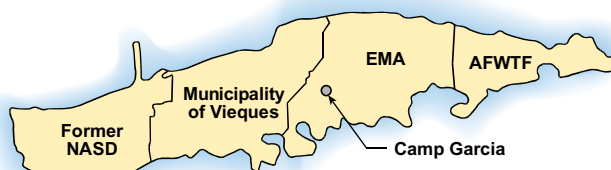
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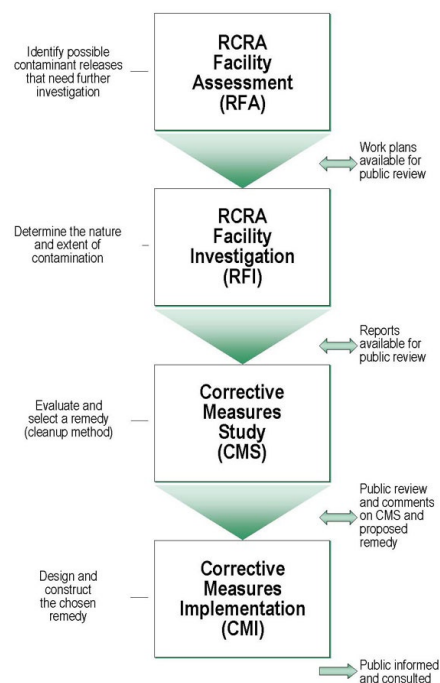


Figure 2
RCRA Process



WHAT COMES NEXT?

If the RFI confirms that a cleanup or other corrective action is needed at one or more of the sites, a Corrective Measures Study (CMS) will be prepared to evaluate alternatives. After the CMS is completed and EPA has tentatively selected the preferred response action, EPA will ask the public for its comments on both the CMS Report and the recommended action. Once EPA has reviewed and considered public comments, the response action will be selected and the RCRA Consent Order will be modified, if the CMS requires the Navy to implement a final cleanup plan.

LIVE IMPACT AREA

Other known areas of potential contamination on the AFWTF, including the OB/OD area at which unexploded ordnance has been destroyed and the Live Impact Area, are not currently included in the Consent Order and the RFI, because they are part of the active military training range. If the military training range is closed, the removal of ordnance explosives and the environmental cleanup at the active military range will be addressed separately.

PUBLIC PARTICIPATION

Public participation is an important part of the environmental investigation and cleanup process. Input from Vieques residents will help the Navy and the EPA make better decisions. The public will have several formal opportunities to comment on the study documents and the proposed remedies. However, questions and comments are welcome at any time during the study process. People from EPA,

the Navy, and EQB who can answer questions are listed at the end of this fact sheet.

EPA and the Navy will work with community members from Vieques to prepare a Community Relations Plan. This plan will describe how the community will be kept informed about the activities carried out under the Consent Order and how public input will be obtained. *If you are interested in helping us to develop this plan, please contact Carlos Ramos (see last page).*

The Navy maintains a mailing list of people who want to receive fact sheets and other information about the environmental study and cleanup process on Vieques Island. *To get on the mailing list, please contact Carlos Ramos (see last page).*

Several public information repositories exist, at which the Consent Order, work plans, fact sheets, technical reports and other documents are available for public review. Locations and hours of the public information repositories are shown on the last page.

A Technical Review Committee was formed in 2001, to provide a forum for exchanging information about the cleanup of the Navy's former property on the western side of Vieques. This group of interested Vieques residents and government representatives will also be a valuable link between the Navy, EPA, EQB and the local community during the investigation and cleanup of the EMA and AFWTF under the Consent Order. *For information about meetings of the TRC for the environmental investigation of western Vieques, please contact Madeline Rivera Ruiz or Christopher Penny (see last page).*

GLOSSARY

AOC Area of Concern.

An area that might be contaminated, based on information about its previous use.

CERCLA

The Comprehensive Environmental Response, Compensation and Liability Act (commonly known as "Superfund") provides a process for identifying, investigating, and cleaning up hazardous substances that have been released into the environment and may pose a risk to human health and the environment. The Navy's Installation Restoration (IR) program is conducted under DoD's CERCLA authority.

CMI

Corrective Measures Implementation. The final phase in a RCRA corrective action, when the selected cleanup technology is constructed or installed and operated until cleanup levels are reached.

CMS

Corrective Measures Study. Examines alternatives for cleanup in a RCRA corrective action, based on a RCRA Facility Investigation (RFI), and recommends a preferred remedy.

Consent Order

A RCRA corrective action order can be a Consent Order, when the facility owner (Navy) and EPA come to an agreement about the need for and details of a corrective action, or a Unilateral Order, when agreement cannot be reached.

Corrective action

The sequence of actions, from initial facility assessment to the completion of remedial action, that are taken to address releases of hazardous wastes at a RCRA-permitted facility.

Ground water

Water that flows under the ground and supplies wells and springs. It can come from rainwater that soaked into the ground or it can flow underground from "uphill" locations. Ground water can flow out into a stream or another "downhill" surface water body. Ground water can carry contaminants from one place to another.

Interim measure

A short-term action that is taken to address a release or threatened release of hazardous substances.

Lead agency

The agency with the authority to make final decisions. At CERCLA sites not on the National Priorities List (NPL), the Navy is the lead agency, with EPA involvement. At CERCLA sites on the NPL, EPA is the lead agency. At RCRA sites, EPA is the lead agency.

Ordnance/Explosives

Ordnance includes military material such as weapons, ammunition, combat vehicles, and the equipment used to maintain them. Explosives can include ammunition, gunpowder, flash cartridges, blasting caps, etc.

RFA

RCRA Facility Assessment. The first step towards a RCRA corrective action. Records review, visual site inspection and limited sampling, looking for evidence that hazardous wastes might have been (or could be) released to the environment and a corrective action may be needed.

RFI

RCRA Facility Investigation. Detailed study to determine the nature (what substances) and extent (how much, how large an area) of contamination; to assess the possible risk to human health or the environment; to determine whether or not corrective action is needed; and to support the evaluation of remedial alternatives.

SWMU

Solid Waste Management Unit. A designated area that is, or is suspected to be, the source of a release of wastes (hazardous or non-hazardous) into the environment. Requires investigation and possibly corrective action.

TRC

Technical Review Committee. A group of individuals, including Navy, EPA, state and local officials, and community members, who review and comment on technical reports.

WHAT WILL THE NAVY DO UNDER ITS CONSENT ORDER WITH EPA?

In January 2000, EPA and the Navy voluntarily entered into a RCRA Administrative Order on Consent to address potential environmental contamination at certain (non-range) areas of the AFWTF and EMA. The Consent Order requires the Navy to perform a **RCRA Facility Investigation (RFI)** at nine **Solid Waste Management Units (SWMUs)** and three **Areas of Concern (AOCs)**. AOCs are areas that may be contaminated, but are not clearly linked to waste management activities. The twelve sites that will be investigated under the Consent Order do not include sites used as active military ranges, either for training or the disposal of waste munitions, such as the Live Impact Area and Open Burn/Open Detonation (OB/OD) area at AFWTF.

If the results of the investigations show that cleanup work or other actions are

needed to address any threats posed to people's health or to the environment, the Consent Order also requires the Navy to perform a Corrective Measures Study (CMS) to evaluate alternatives to do this work. Also, the Consent Order requires the Navy to take **interim measures**, if necessary, to prevent or reduce any immediate threats to people's health (including Navy personnel working at Camp Garcia) or to the environment that might be discovered while the study process is underway.

All of the Navy's work under this Consent Order is subject to EPA's approval and oversight, with input from EQB. In addition, the public will be given the opportunity to review and comment on all significant documents and plans developed under this Consent Order.

PLANNING FOR THE INVESTIGATIONS

The first step in the RFI is to prepare a *Description of Current Conditions Report*,

which pulls together historical information and current knowledge about existing conditions at the identified SWMUs and AOCs, as well as any other areas of the facility currently or previously used for treatment, storage, or disposal of solid or hazardous waste. This report is then used to prepare the work plans for the investigations.

The RFI Work Plans describe the objectives, technical approach, and schedule for a site investigation. They describe where and how samples will be collected and handled, which contaminants will be investigated, and how the samples will be analyzed. A work plan has also been prepared for completing the baseline groundwater investigation along the western boundary of the EMA. This investigation will supplement previous groundwater investigations conducted by the Navy.

Once EPA has approved the RFI Work Plans and the *Description of Current Conditions* report, these documents will be released for public review.

ENVIRONMENTAL INVESTIGATIONS AND RESULTS

After the RFI work plans are finalized, samples will be collected from the soil, surface water, or ground water at each of the twelve sites. Samples will be analyzed using EPA's quality control protocols. After the data are evaluated to determine what chemicals are present at each site, a draft RFI report will be prepared to describe these results and recommend further action (or no action) at each site. Further action may include active cleanup work. The report will be submitted to EPA Region 2 and the EQB for review and approval. This process could take one or more years to complete. EPA will notify the community when the draft RFI report is available for public comment and review.

In 1999, the Navy prepared a report indicating that the results of the groundwater, surface soil and subsurface soil sampling along the western border of the EMA did not detect munitions-related contaminants. This report, *Results of the Hydrogeologic Investigation, Vieques Island, Puerto Rico* (November 1999), was based on sampling work that the Navy initiated and completed independently, before entering into the January 2000 RCRA Consent Order. To satisfy EPA's RCRA requirements under the Consent Order, the Navy will collect more groundwater samples from designated groundwater monitoring wells and analyze these samples for additional contaminants as specified in the work plan. The *Work Plan for Groundwater Baseline Investigation at the US Navy's Eastern Maneuver Area, Puerto Rico*, describes how this additional work will be done. It will be made available for public review and comments, along with the other RFI work plans, before being finalized.

TWELVE SITES WILL BE INVESTIGATED UNDER THE CONSENT ORDER

Nine SWMUs and three suspected AOCs are required to be investigated under the Consent Order. These SWMUs and AOCs were identified in the **RCRA Facility Assessments (RFA)** of the AFWTF and EMA that were prepared for EPA in 1988 and 1995. These twelve sites cover a total of approximately 80 acres. All are located on Navy-owned lands, mostly at or near Camp Garcia. Actions at another three SWMUs (#3, #9, and #11) are deferred, because they are currently part of active military ranges.

- SWMU 1 - Camp Garcia Landfill
- SWMU 2 - Fuels Off-Loading Site (Camp Garcia)

- SWMU 4 - Waste Areas of Building 303 (Camp Garcia)
- SWMU 5 - Spent Battery Accumulation Area (Observation Post 1, AFWTF Inner Range)
- SWMU 6 - Waste Oil and Paint Accumulation Area (Seabees Area, Camp Garcia)
- SWMU 7 - Waste Oil Accumulation Area (outside Building 303 at Camp Garcia)
- SWMU 8 - Waste Oil Accumulation Area (Observation Post 1, AFWTF Inner Range)
- SWMU 10 - Sewage Treatment Lagoons (Camp Garcia)
- SWMU 12 - Solid Waste

Collection Unit Area (Observation Post 1, AFWTF Inner Range)

- AOC A - Diesel Fuel Fill Pipe Area (Observation Post 1, AFWTF Inner Range)
- AOC F - Rock Quarry (Camp Garcia)
- AOC G - Pump Station and Chlorinating Building at Sewage Lagoons (Camp Garcia)

Some Potential Areas of Concern (PAOCs), which are discussed in the *Description of Current Conditions Report*, could be added to the requirements of the Consent Order, if preliminary study finds evidence that hazardous or solid wastes might have been released at these areas.

WHERE CAN I GET MORE INFORMATION?

Public Information Repositories

US Environmental Protection Agency

Caribbean Environmental
Protection Division
Attention: Daniel Rodriguez
Centro Europa Building, Suite 417
1492 Ponce De Leon Avenue
San Juan, PR 00907
Hours: Monday-Friday, 8:00 a.m.-4:00 p.m.
Telephone: (787) 977-5849
Email: Rodriguez.Daniel@epa.gov

Biblioteca Pública, José Gautier Benitez
Calle Baldorioty de Castro
Vieques Island, PR
Hours: Monday-Friday, 8:00 a.m.-6:00 p.m.
Telephone: 787-741-3706

People to call with questions or comments:

U.S. Environmental Protection Agency

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*Files are also available at the Puerto Rico
Environmental Quality Board. See point-of-
contact information below.*

Puerto Rico Environment Quality Board

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